

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for forward transmission comprising:
processing a present data frame to be transmitted, the present data frame comprising:
a header subframe containing frame mapping information of data to be transmitted to a plurality of terminals; and
data subframes containing data multiplexed therein, and to be transmitted to the plurality of terminals at a present time in correspondence to frame mapping information transmitted in a frame in advance of the header subframe of the present frame, wherein the frame mapping information transmitted in the frame in advance of the header subframe of the present frame includes a header subframe having subframe numbers arranged in ~~a specific an~~ order to correspond to positions of the corresponding multiplexed subframes in the present frame and the frame in advance additionally includes data subframes following the header subframe, wherein the frame mapping information transmitted in the frame in advance of the present frame includes the subframe numbers transmitted 'n' frames before the present frame in succession, and the multiplexed data subframes are positioned in the present frame according to an order of transmission of the subframe numbers that is transmitted in the frame in advance of the present frame; and

transmitting the present data frame to at least one of the plurality of terminals; and
performing decoding of the present frame at the one of the plurality of terminals.

2. (Previously Presented) The method as claimed in claim 1, wherein the frame mapping information transmitted in advance of the present frame is transmitted 'n' frames before the present frame.

3-4. (Canceled)

5. (Previously Presented) The method as claimed in claim 1, wherein the header subframe contains data subframe numbers, frame quality indicator, and reserved/encoder tail information.

6. (Previously Presented) The method as claimed in claim 1, wherein the data subframe contains data to be transmitted to a relevant terminal, frame quality indicators, and reserved/encoder tail information.

7. (Previously Presented) The method as claimed in claim 1, wherein the header subframe is scrambled in a code all the terminals know.

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8. (Previously Presented) The method as claimed in claim 1, wherein the data subframes are encoded in codes only relevant terminals know.

9. (Previously Presented) The method as claimed in claim 1, wherein the data subframes are multiplexed according to an order of generation.

10. (Previously Presented) The method as claimed in claim 1, wherein the data subframes are multiplexed in the present frame according to priorities of the terminals.

11. (Previously Presented) The method as claimed in claim 1, wherein the data subframes are encoded, symbol repeated, interleaved, and scrambled.

12. (Previously Presented) The method as claimed in claim 1, wherein in case the data subframe can not complete one frame fully, a power supply for a section of the frame without data transmission is turned off.

13. (Previously Presented) The method as claimed in claim 1, wherein at least one of the data subframes contains a broadcasting data to be transmitted to all terminals.

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14. (Previously Presented) The method as claimed in claim 13, wherein the frame mapping information of the data subframe that transmits the broadcasting data is transmitted 'n' frames before the header subframe of the present frame.

15. (Previously Presented) The method as claimed in claim 13, wherein the data subframe that transmits the broadcasting data is scrambled with codes known to all terminals that use the broadcasting service.

16. (Currently Amended) A method for forward transmission of a data, the method comprising:

(a) processing data to be transmitted at a present time ~~to form~~ into a present frame having subframes;

(b) multiplexing the formed subframes of the present frame according to subframe mapping information that is transmitted to a plurality of terminals in a frame in advance of the present frame, wherein the frame in advance of the present frame includes a header subframe having subframe numbers corresponding to the subframe mapping information, and a plurality of subframes that follow the header subframe of the frame in advance; ~~and~~

(c) transmitting, to the plurality of terminals, the multiplexed subframes of the present frame together with subframe mapping information of the subframes to be transmitted after transmitting the present frame, wherein the subframe mapping information includes

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subframe numbers in ~~a specific~~ an order to correspond to positions of formed subframes to be transmitted after the present frame in a subsequent frame; and

(d) performing decoding of the present frame at one of the plurality of terminals.

17. (Previously Presented) The method as claimed in claim 16, wherein processing data includes:

encoding, symbol repetition, interleaving, and scrambling for forming subframes.

18. (Previously Presented) The method as claimed in claim 16, further comprising:

a terminal being allocated with a subframe number of the terminal;

the terminal receiving subframe mapping information, and determining containment of the subframe number of the terminal; and

the terminal receiving a data for the terminal after 'n' frames at a position the subframe number indicates, if the subframe number of the terminal is contained as a result of the determination.

19. (Previously Presented) The method as claimed in claim 16, wherein the formed subframes are multiplexed in the present frame according to an order of formation.

20. (Previously Presented) The method as claimed in claim 16, wherein the formed subframes are multiplexed in the present frame according to priorities of the terminals.

21. (Previously Presented) The method as claimed in claim 16, wherein the frame mapping information is scrambled with codes all the terminals know.

22. (Previously Presented) The method as claimed in claim 16, wherein the subframes are scrambled with codes only a relevant terminal knows.

23. (Previously Presented) The method as claimed in claim 16, wherein the number of formed subframes is increased/decreased in proportion to a transmission rate of a data transmission channel.

24. (Currently Amended) A method for forward transmission comprising:

transmitting a previous frame to a plurality of terminals;

processing data to be transmitted in a present frame that follows the previous frame, the data including:

a header subframe containing a plurality of subframe numbers relating to data for ~~[[a]]~~ the plurality of terminals; ~~and~~

a plurality of data subframes each containing data to be transmitted to the plurality of terminals, wherein an order of the plurality of data subframes in the present frame ~~identifies~~ corresponds to an order of subframe numbers that is transmitted in ~~the~~ a previous frame prior to transmission of the present frame, wherein the previous frame include a header

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subframe having the subframe numbers, and a plurality of subframes that follow the header subframe of the previous frame, and

transmitting the data of the present frame to at least one of the plurality of terminals; and

performing decoding of the present frame at the one of the plurality of terminals based on the previously-received previous frame.

25. (Previously Presented) The method of claim 24, wherein the subframe numbers contain information related to positions of the data subframes within the present frame.

26. (Previously Presented) The method of claim 24, wherein the header subframe contains data subframe numbers, frame quality indicator, and reserved/encoder tail information.